

224873

**SEARCH REQUEST FORM Scientific and Technical Information Center - EIC2800**

Rev. 3/19/2007 This is an experimental format -- Please give suggestions or comments to Jeff Harrison, JEF-4B68, 22511.

Date 5/15/07 Serial # 10/715,227 Priority Application Filing Date 6/19/98

Your Name M. Lewis Examiner # 73172

AU 2899 Phone 299-1838 Room 5A39

In what format would you like your results? Paper is the default. PAPER DISK EMAIL

If submitting more than one search request form, please prioritize the searches in order of need.

Where have you searched so far on this case?

Circle: USPAT USPGPUB DWPI EPO Abs JPO Abs IBM TDB  
Other: Need before 5/21

What relevant art have you found so far? Please attach citations or Information Disclosure Statements. 5/21

What types of references would you like? Please checkmark:

Primary Refs ☒ Nonpatent Literature ☐ Teaching Refs ☐  
Secondary Refs ☐ Foreign Patents ☐ Other ☐

MAY 15 RECD

If this is a "Fast & Focused Search" request, put a checkmark here: ☐

And then please speak in-person immediately with the  
EIC2800 Technical Information Specialist or with an EIC2800 Searcher.

A "Fast & Focused Search" is completed in 2 hours (maximum). The search must be on a very specific topic and meet certain criteria. The criteria are posted in EIC2800 and on the STIC NPL Web Page at <http://uspto-a-pattr-2/siraapps/stic/npl/nplsearch.htm>

In your own words, what is the topic, such as the novelty, motivation, utility, or other specific facets defining the desired focus of this search? Please include the concepts, synonyms, keywords, acronyms, registry numbers, definitions, structures, strategies, and anything else that helps to describe the topic. Please attach a copy of the abstract and pertinent claims.

Claims 1-12 & 14  
Anti-reflective materials

Problem: See pages 2-6  
Solution: " " 6-8

Scott  
Please do an updated  
search

10/715,227

5/17/07

10:50:23 ON 17 MAY 2007

12:17:15 ON 17 MAY 2007

FILE 'REGISTRY' ENTERED AT 10:50:28 ON 17 MAY 2007

E H.N.O.SI/MF  
L1 18 SEA ABB=ON PLU=ON H.N.O.SI/MF  
E H N O SI/MF  
L2 3 SEA ABB=ON PLU=ON "H N O SI"/MF  
E E N.O.SI/MF  
E N.O.SI/MF  
L3 474 SEA ABB=ON PLU=ON N.O.SI/MF  
E N O SI/MF  
L4 11 SEA ABB=ON PLU=ON "N O SI"/MF  
E N.SI/MF  
L5 396 SEA ABB=ON PLU=ON N.SI/MF  
E N SI/MF  
L6 6 SEA ABB=ON PLU=ON "N SI"/MF  
E H N O SI/ELF  
L7 227 SEA ABB=ON PLU=ON "H N O SI"/ELF  
E N O SI/ELF  
L8 497 SEA ABB=ON PLU=ON "N O SI"/ELF  
E N SI/ELF  
L9 852 SEA ABB=ON PLU=ON "N SI"/ELF  
L10 10637 SEA ABB=ON PLU=ON SI/ELS,MAC AND (OXYNITRIDE OR OXINITRIDE  
OR OXIME OR NITRIDE OR NITRIDE(A)OXIDE)  
L11 1578 SEA ABB=ON PLU=ON (L1 OR L2 OR L3 OR L4 OR L5 OR L6 OR L7 OR  
L8 OR L9)

FILE 'HCAPLUS' ENTERED AT 10:52:48 ON 17 MAY 2007

L12 33751 SEA ABB=ON PLU=ON L11(L)(?COAT? OR ?FILM? OR ?LAYER? OR  
?SURFACE? OR INTERFAC####)  
L13 36139 SEA ABB=ON PLU=ON L10(L)(?COAT? OR ?FILM? OR ?LAYER? OR  
?SURFACE? OR INTERFAC####)  
L14 36173 SEA ABB=ON PLU=ON L12 OR L13  
L15 31156 SEA ABB=ON PLU=ON (SILICON NITRIDE OR SI3N4 OR TRISILICON  
TETRANITRIDE OR SIN)(3A)(?COAT? OR ?FILM? OR ?LAYER? OR  
?SURFACE? OR INTERFAC####)  
L16 15336 SEA ABB=ON PLU=ON (SION OR SINO OR OXYNITRIDE OR 123033-76-0  
OR OXIDE(A)NITRIDE OR SILICON(1A)OXIME OR SI OXIME OR SI  
NITRIDE)(3A)(?COAT? OR ?FILM? OR ?LAYER? OR ?SURFACE? OR  
INTERFAC####)  
L17 193 SEA ABB=ON PLU=ON (SI(2W)O(2W)N)(3A)(?COAT? OR ?FILM? OR  
?LAYER? OR ?SURFACE? OR INTERFAC####)  
L18 52506 SEA ABB=ON PLU=ON L14 OR ((L15 OR L16 OR L17))  
L19 1 SEA ABB=ON PLU=ON L18 AND (PARTIC? OR MICROPARTIC? OR  
NANOPARTIC?)(2A)(PER SQUARE)  
L20 9 SEA ABB=ON PLU=ON L18 AND (PARTIC? OR MICROPARTIC? OR  
NANOPARTIC?)(2A)(SURFACE ROUGHNESS)  
L21 0 SEA ABB=ON PLU=ON L18 AND (SURFACE ROUGHNESS)(2A)(ANTIREFLECT  
##### OR ANTI REFLEC##### OR ANTIGLAR### OR ANTI GLAR#####)  
L22 227 SEA ABB=ON PLU=ON ((SMOOTH? OR ROUGH?)(2A)(?SURFACE? OR  
?COAT? OR ?LAYER? OR ?FILM? OR INTERFAC####))(3A)(SIN OR  
SILICON NITRIDE OR SI NITRIDE OR OXYNITRIDE OR SILICON OXIME)  
L23 0 SEA ABB=ON PLU=ON ((SMOOTH? OR ROUGH?)(2A)(?SURFACE? OR  
?COAT? OR ?LAYER? OR ?FILM? OR INTERFAC####))(3A)(SI(2W)O(2W)N)  
L24 803 SEA ABB=ON PLU=ON (L10 OR L11)(L)((SMOOTH? OR ROUGH? OR  
TEXTURE# OR UNSMOOTH? OR UNIFORM? OR NONUNIFORM?))  
L25 690 SEA ABB=ON PLU=ON L24 AND (?COAT? OR ?FILM? OR ?LAYER? OR  
?SURFACE? OR INTERFAC?)  
L26 61007 SEA ABB=ON PLU=ON (SILICON NITRIDE OR SIN OR SI NITRIDE OR  
OXYNITRIDE OR SILICON OXIME OR (SI(2W)O(2W)N) OR SI3N4)(L)(?COA  
T? OR ?LAYER? OR ?SURFACE? OR INTERFAC### OR ?FILM?)  
L27 2977 SEA ABB=ON PLU=ON L26 AND (SMOOTH? OR ROUGH? OR EVENLY OR  
TEXTURE#)  
L28 2819 SEA ABB=ON PLU=ON L26 AND (?SURFACE? OR ?FILM? OR ?COAT? OR  
?LAYER?)(2A)(ROUGH? OR SMOOTH? OR TEXTURE# OR ENGINEERED OR  
UNIFORM? OR NONUNIFORM?)

L29 176 SEA ABB=ON PLU=ON L26 AND ((DEFECT OR GRANUL? OR MICROGRAN?  
 OR GRAIN OR ?PARTIC? OR NANOPARTIC) (2A) (DENSIT### OR VOLUME))  
 L30 863 SEA ABB=ON PLU=ON L26 AND (TEXTURED OR ENGINEERED OR  
 CONTROLLED OR PREDETERMINED) (2A) (?SURFACE? OR ?LAYER? OR  
 ?FILM? OR ?COAT? OR INTERFAC###)  
 L31 122 SEA ABB=ON PLU=ON L26 AND (?PARTIC?) (2A) (DENSIT### OR VOLUME  
 OR SURFACE AREA)  
 L32 186 SEA ABB=ON PLU=ON L26 AND (SURFACE) (1A) (TOPOG? OR WAVINESS  
 OR DEFORM? OR ANOMAL### OR JAGGED OR IRREGULAR?)  
 L33 6 SEA ABB=ON PLU=ON L26 AND (SURFACE) (1A) (ENGINEERED OR  
 ARCHITECT?)  
 L34 23 SEA ABB=ON PLU=ON L26 AND (SURFACE) (1A) (SCRATCH? OR SCUFF?  
 OR SURFACE AREA PARTICLES)  
 L35 2161 SEA ABB=ON PLU=ON ((SMOOTH? OR ROUGH?) (2A) (?COAT? OR  
 ?SURFACE? OR ?LAYER? OR ?FILM? OR INTERFAC###)) AND (L10 OR  
 L11)  
 L36 2147 SEA ABB=ON PLU=ON ((SMOOTH? OR ROUGH?) (2A) (?COAT? OR  
 ?SURFACE? OR ?LAYER? OR ?FILM? OR INTERFAC###)) AND (SILICON  
 NITRIDE OR OXYNITRIDE OR SI NITRIDE OR SILICON OXIME)  
 L37 19 SEA ABB=ON PLU=ON ((SMOOTH? OR ROUGH?) (2A) (?COAT? OR  
 ?SURFACE? OR ?LAYER? OR ?FILM? OR INTERFAC###)) AND (SI(2W)O(2W  
 )N)  
 L38 35 SEA ABB=ON PLU=ON ((SMOOTH? OR ROUGH?) (2A) (?COAT? OR  
 ?SURFACE? OR ?LAYER? OR ?FILM? OR INTERFAC###)) AND (SION OR  
 SINO)  
 L39 8 SEA ABB=ON PLU=ON L18 AND (FILM PARTICLE)  
 L40 9 SEA ABB=ON PLU=ON (L10 OR L11 OR SILICON NITRIDE OR OXYNITRID  
 E OR SI NITRIDE OR SIN OR SILICON OXIME OR SI OXIME) AND (FILM  
 PARTICLE)  
 L41 6028 SEA ABB=ON PLU=ON (L10 OR L11 OR SILICON NITRIDE OR OXYNITRID  
 E OR SI NITRIDE OR SIN OR SILICON OXIME OR SI OXIME) AND  
 (SURFACE(1A)ROUGH? OR SMOOTH? OR TEXTURE# OR ENGINEERED OR  
 DEFORM? OR DISTORT? OR IRREGULAR?)  
 L42 4547 SEA ABB=ON PLU=ON (L10 OR L11 OR SILICON NITRIDE OR OXYNITRID  
 E OR SI NITRIDE OR SIN OR SILICON OXIME OR SI OXIME) AND  
 (SURFACE(1A)IMPERFECT? OR DEFECT OR RUGOSIT### OR ANOMAL### OR  
 NOTCH### OR TOPOGR?)  
 L43 3401 SEA ABB=ON PLU=ON (L10 OR L11 OR SILICON NITRIDE OR OXYNITRID  
 E OR SI NITRIDE OR SIN OR SILICON OXIME OR SI OXIME) AND  
 (SURFACE(1A)WAVINESS OR DENSIT### OR ASPERIT? OR MICROROUGH?  
 OR MICROTTEXTURE#)  
 L44 350 SEA ABB=ON PLU=ON (L10 OR L11 OR SILICON NITRIDE OR OXYNITRID  
 E OR SI NITRIDE OR SIN OR SILICON OXIME OR SI OXIME) AND  
 (?PARTIC?) (2A) (ARRAY OR MATRIX OR MATRIC### OR PATTERN? OR  
 MICROPATTERN? OR NANOPATTERN?)  
 L45 93 SEA ABB=ON PLU=ON ((?PARTIC?) (2A) (STICK OR STICKING)) (3A) (?SU  
 RFACE? OR ?FILM? OR INTERFAC### OR ?COAT?)  
 L46 2445 SEA ABB=ON PLU=ON (L10 OR L11 OR SILICON NITRIDE OR OXYNITRID  
 E OR SI NITRIDE OR SIN OR SILICON OXIME OR SI OXIME) AND  
 (SURFACE(1A)PREDETERMINED OR FEATURE)  
 L47 17704 SEA ABB=ON PLU=ON (L19 OR L20 OR L21 OR L22 OR L23 OR L24 OR  
 L25) OR (L27 OR L28 OR L29 OR L30 OR L31 OR L32 OR L33 OR L34  
 OR L35 OR L36 OR L37 OR L38 OR L39 OR L40 OR L41 OR L42 OR L43  
 OR L44 OR L45 OR L46)  
 L48 401 SEA ABB=ON PLU=ON L47 AND (ANTIREFLECT##### OR ANTI REFLEC###  
 ### OR ANTIGLAR### OR ANTI GLAR#####)  
 L49 2 SEA ABB=ON PLU=ON L47 AND (NONGLAR##### OR NON GLAR##### OR  
 NONREFLECT##### OR NON REFLECT#####)  
 D SCAN  
 L50 33 SEA ABB=ON PLU=ON L47 AND (REDUC#### OR DECREAS#### OR  
 LOWER####) (3A) (REFLECT#### OR GLAR##)  
 L51 83 SEA ABB=ON PLU=ON L47 AND (AC OR ARC) (3A) (?SURFACE? OR  
 ?COAT? OR ?FILM? OR GLASS## OR LENS OR ?LAYER? OR INTERFAC###)  
 L52 42 SEA ABB=ON PLU=ON L47 AND (BARC OR DARC)  
 L53 382 SEA ABB=ON PLU=ON L47 AND (PHOTOABSOR##### OR ((PHOTO OR  
 RADIATION OR LIGHT) (2A) ABSOR#####)) OR ((SHIELD### OR  
 SCREEN###) (2A) (GLAR### OR REFLECT#####)) (3A) (?SURFACE OR  
 ?LAYER? OR ?FILM? OR ?COAT? OR DEPOSIT? OR GLASS## OR LENS OR  
 SHEET OR INTERFACE#)  
 L54 5066 SEA ABB=ON PLU=ON L47 AND (CVD OR PVD OR DEPOSIT####)  
 L55 304 SEA ABB=ON PLU=ON ((L48 OR L49 OR L50 OR L51 OR L52 OR L53))  
 AND (CVD OR PVD OR DEPOSIT?)

L56 2884 SEA ABB=ON PLU=ON (L47) AND (CVD OR PVD OR VAPOR DEPOSIT?)  
 D HIDS  
 L57 0 SEA ABB=ON PLU=ON L47 AND (IMPERFECTION DENSIT###)  
 L58 123 SEA ABB=ON PLU=ON L47 AND (FILM OR SURFACE) (1A) (?PARTIC?)  
 L59 1344 SEA ABB=ON PLU=ON ((L48 OR L49 OR L50 OR L51 OR L52 OR L53  
 OR L54 OR L55 OR L56 OR L57 OR L58)) AND (MICROROUGH? OR  
 ROUGH? OR SMOOTH? OR MICROSMOOTH?)  
 L60 1070 SEA ABB=ON PLU=ON ((L48 OR L49 OR L50 OR L51 OR L52 OR L53  
 OR L54 OR L55 OR L56 OR L57 OR L58)) AND (?SURFACE? OR ?FILM?  
 OR ?LAYER? OR ?COAT?) (3A) (MICROROUGH? OR ROUGH? OR SMOOTH? OR  
 MICROSMOOTH?)  
 L61 33 SEA ABB=ON PLU=ON ((L48 OR L49 OR L50)) AND (SURFACE) (1W) (ROU  
 GH? OR SMOOTH?)  
 L62 648 SEA ABB=ON PLU=ON ((L48 OR L49 OR L50 OR L51 OR L52 OR L53  
 OR L54 OR L55 OR L56 OR L57 OR L58)) AND (SURFACE) (1W) (ROUGH?  
 OR SMOOTH?)  
 L63 158 SEA ABB=ON PLU=ON L62 AND SMOOTH?  
 L64 3 SEA ABB=ON PLU=ON L62 AND (SURFACE) (2A) (EVEN#####)  
 L65 0 SEA ABB=ON PLU=ON L62 AND (INFILM)  
 L66 84 SEA ABB=ON PLU=ON L62 AND (L10 OR L11) (L) (SMOOTH? OR ROUGH?)  
 L67 208 SEA ABB=ON PLU=ON L19 OR L20 OR L33 OR L34 OR L37 OR L38 OR  
 L39 OR L40 OR L61 OR L64 OR L66  
 L68 90 SEA ABB=ON PLU=ON L67 AND P/DT  
 L69 118 SEA ABB=ON PLU=ON L67 NOT L68  
 L70 38 SEA ABB=ON PLU=ON L69 NOT 1999-2007/PY  
 L71 29 SEA ABB=ON PLU=ON L68 AND 1980-1998/PRY,PY  
 L72 79 SEA ABB=ON PLU=ON L68 AND 1999-2007/PRY,PY  
 L73 11 SEA ABB=ON PLU=ON L68 NOT L72  
 L74 29 SEA ABB=ON PLU=ON L71 OR L73  
 L75 67 SEA ABB=ON PLU=ON L74 OR L70  
 D L75 ALL 1-67  
 S (SILICON NITRIDE OR SI3N4 OR TRISILICON TETRANITRIDE OR 1203

FILE 'REGISTRY' ENTERED AT 12:06:33 ON 17 MAY 2007

L76 1 SEA ABB=ON PLU=ON 12033-60-2/RN

FILE 'HCAPLUS' ENTERED AT 12:06:34 ON 17 MAY 2007

L77 680 SEA ABB=ON PLU=ON L76

FILE 'REGISTRY' ENTERED AT 12:06:34 ON 17 MAY 2007

L78 1 SEA ABB=ON PLU=ON 12033-89-5/RN

FILE 'HCAPLUS' ENTERED AT 12:06:35 ON 17 MAY 2007

L79 84037 SEA ABB=ON PLU=ON L78

L80 109419 SEA ABB=ON PLU=ON (SILICON NITRIDE OR SI3N4 OR TRISILICON  
 TETRANITRIDE OR L79 OR L77 OR SIN)

L81 36827 SEA ABB=ON PLU=ON (SION OR SINO OR OXYNITRIDE OR 123033-76-0  
 OR OXIDE(A)NITRIDE OR SILICON(1A)OXIME OR SI OXIME OR SI  
 NITRIDE)

L82 1771 SEA ABB=ON PLU=ON (SI(2W)O(2W)N)

L83 125031 SEA ABB=ON PLU=ON (L80 OR L81 OR L82)

L84 101340 SEA ABB=ON PLU=ON L10 OR L11

L85 130522 SEA ABB=ON PLU=ON L83 OR L84

L86 711 SEA ABB=ON PLU=ON L85 AND (SURFACE(2A) SMOOTH?)

L87 319 SEA ABB=ON PLU=ON L86 AND (?LAYER?)

L88 0 SEA ABB=ON PLU=ON L86 AND (BARC OR DARC)

L89 6 SEA ABB=ON PLU=ON L86 AND (PEAK(1A) VALLEY)

L90 2 SEA ABB=ON PLU=ON L86 AND (?PARTIC?) (2A) (DENSIT### OR VOLUME  
 OR SQUARE MILLIM? OR SQUARE CENTIMET?)

L91 0 SEA ABB=ON PLU=ON L86 AND (FILM PARTICLE)

L92 9 SEA ABB=ON PLU=ON L86 AND (ANTIREFLECT##### OR ANTI REFLEC###  
 ### OR ANTIGLAR### OR ANTI GLAR#####)

L93 0 SEA ABB=ON PLU=ON L86 AND (REDUC##### OR DECREAS##### OR  
 LOWER#####) (3A) (REFLECT##### OR GLAR##)

L94 15 SEA ABB=ON PLU=ON L86 AND (FIRST OR 1ST) (1A) (LAYER)

L95 16 SEA ABB=ON PLU=ON L86 AND (SECOND OR 2ND) (1A) (LAYER)

L96 0 SEA ABB=ON PLU=ON L86 AND (MICROROUGH? OR MICROSMOOTH?)

L97 18 SEA ABB=ON PLU=ON L86 AND (SURFACE(2A) WAVINESS OR TEXTURE#  
 OR ENGINEERED)

L98 141 SEA ABB=ON PLU=ON L86 AND ((VAPOR OR VAPOUR) (W) (DEPOSITION)  
 OR CVD OR PVD)

L99 12 SEA ABB=ON PLU=ON L86 AND (SURFACE OR FILM) (2A) (UNIFORM? OR  
 NONUNIFORM? OR IRREGULAR?)

L100	12	SEA ABB=ON	PLU=ON	L86 AND (SURFACE OR FILM) (2A) (DEFECT? OR DEFORM? OR ANOMAL?)
L101	75	SEA ABB=ON	PLU=ON	(L89 OR L90 OR L91 OR L92 OR L93 OR L94 OR L95 OR L96 OR L97) OR (L99 OR L100)
L102	73	SEA ABB=ON	PLU=ON	L101 NOT L75
L103	39	SEA ABB=ON	PLU=ON	L102 AND P/DT
L104	34	SEA ABB=ON	PLU=ON	L102 NOT L103
L105	19	SEA ABB=ON	PLU=ON	L104 NOT 1999-2007/PY
L106	22	SEA ABB=ON	PLU=ON	L103 AND 1980-1998/PRY, PY
L107	23	SEA ABB=ON	PLU=ON	L103 AND 1999-2007/PRY, PY
L108	16	SEA ABB=ON	PLU=ON	L103 NOT L107
L109	22	SEA ABB=ON	PLU=ON	L106 OR L108
L110	41	SEA ABB=ON	PLU=ON	L109 OR L105
				D L110 ALL 1-41

10/715,227

5/17/07

08:30:34 ON 17 MAY 2007

10:12:20 ON 17 MAY 2007

FILE 'WPIX, JAPIO' ENTERED AT 08:30:42 ON 17 MAY 2007

L1 34511 SEA ABB=ON PLU=ON (SILICON NITRIDE OR SI3N4 OR TRISILICON  
TETRANITRIDE OR SIN) (3A) (SURFACE? OR LAYER#### OR MULTILAYER###  
# OR TOPLAYER#### OR INTERLAYER#### OR FILM OR COAT#### OR  
INTERFAC### OR SUBLAYER### OR BOTTOMLAYER? OR OVERLAY? OR  
OVERLAID OR MONOLAYER? OR SHEET? OR LENS OR LAMEL? OR LAMINA?)

L2 9901 SEA ABB=ON PLU=ON (SION OR SINO OR OXYNITRIDE OR OXIDE(A)  
NITRIDE OR SILICON(1A) OXIME OR SI OXIME OR SI NITRIDE) (3A) (SUR  
FACE? OR LAYER#### OR MULTILAYER#### OR TOPLAYER#### OR  
INTERLAYER#### OR FILM OR COAT#### OR INTERFAC### OR SUBLAYER##  
# OR BOTTOMLAYER? OR OVERLAY? OR OVERLAID OR MONOLAYER? OR  
SHEET?)

L3 1098 SEA ABB=ON PLU=ON ((SI(1W) O(1W) N) OR (SI(2W) O(2W) N) OR  
(SI(1W) N(1W) O) OR (SION)) (3A) (SURFACE? OR LAYER#### OR  
MULTILAYER#### OR TOPLAYER#### OR INTERLAYER#### OR FILM OR  
COAT#### OR INTERFAC### OR SUBLAYER### OR BOTTOMLAYER? OR  
OVERLAY? OR OVERLAID OR MONOLAYER? OR SHEET?)

L4 1482 SEA ABB=ON PLU=ON (SILICON NITRIDE OR SI3N4 OR TRISILICON  
TETRANITRIDE OR SIN) (5A) (PARTIC? OR MICROPARTIC? OR NANOPARTIC?  
)

L5 524 SEA ABB=ON PLU=ON (SION OR SINO OR OXYNITRIDE OR OXIDE(A)  
NITRIDE OR SILICON(1A) OXIME OR SI OXIME OR SI NITRIDE) (5A) (PAR  
TIC? OR MICROPARTIC? OR NANOPARTIC?)

L6 34 SEA ABB=ON PLU=ON ((SI(1W) O(1W) N) OR (SI(2W) O(2W) N) OR  
(SI(1W) N(1W) O) OR (SION)) (5A) (PARTIC? OR MICROPARTIC? OR  
NANOPARTIC?)

L7 71019 SEA ABB=ON PLU=ON (SILICON NITRIDE OR SI3N4 OR TRISILICON  
TETRANITRIDE OR SIN)

L8 22486 SEA ABB=ON PLU=ON (SION OR SINO OR OXYNITRIDE OR OXIDE(A)  
NITRIDE OR SILICON(1A) OXIME OR SI OXIME OR SI NITRIDE)

L9 2130 SEA ABB=ON PLU=ON ((SI(1W) O(1W) N) OR (SI(2W) O(2W) N) OR  
(SI(1W) N(1W) O))

L10 87753 SEA ABB=ON PLU=ON (L7 OR L8 OR L9)

L11 11502 SEA ABB=ON PLU=ON ((L7 OR L8 OR L9 OR L10)) AND (ABRASIV? OR  
RUGOSIT### OR DISTORT? OR ROUGH##### OR INFILM OR IN FILM OR  
SMOOTH##### OR UNSMOOTH? OR UNIFORM##### OR NONUNIFORM##### OR  
IMPERFECT#### OR DEFECT OR DEFORM#####)

L12 793 SEA ABB=ON PLU=ON ((L7 OR L8 OR L9 OR L10)) (4A) (ABRASIV? OR  
RUGOSIT### OR DISTORT? OR ROUGH##### OR INFILM OR IN FILM OR  
SMOOTH##### OR UNSMOOTH? OR UNIFORM##### OR NONUNIFORM##### OR  
IMPERFECT#### OR DEFECT OR DEFORM#####)

L13 16608 SEA ABB=ON PLU=ON ((L7 OR L8 OR L9 OR L10)) AND (ANOMAL###  
OR NOTCH### OR CRACK### OR HOLE OR VOID OR RECESS## MICROVOID  
OR NANOVOID OR DISLOCAT#### OR IMPURIT### OR CONTAMINAN### OR  
CONTAMINAT#### OR IRREGULAR#####)

L14 1427 SEA ABB=ON PLU=ON ((L7 OR L8 OR L9 OR L10)) (4A) (ANOMAL### OR  
NOTCH### OR CRACK### OR HOLE OR VOID OR RECESS## MICROVOID OR  
NANOVOID OR DISLOCAT#### OR IMPURIT### OR CONTAMINAN### OR  
CONTAMINAT#### OR IRREGULAR#####)

L15 12053 SEA ABB=ON PLU=ON ((L7 OR L8 OR L9 OR L10)) AND (BUMP# OR  
LEVEL OR FLAT OR EVEN#### OR UNEVEN#### OR JAGGED OR TOPOG? OR  
PIT OR PITTING OR SCUFF? OR PEAK OR VALLEY OR GRIT### OR  
COARSE#### OR SCRATCH### OR REGULAR#####)

L16 650 SEA ABB=ON PLU=ON ((L7 OR L8 OR L9 OR L10)) (4A) (BUMP# OR  
LEVEL OR FLAT OR EVEN#### OR UNEVEN#### OR JAGGED OR TOPOG? OR  
PIT OR PITTING OR SCUFF? OR PEAK OR VALLEY OR GRIT### OR  
COARSE#### OR SCRATCH### OR REGULAR#####)

L17 27971 SEA ABB=ON PLU=ON ((L11 OR L12 OR L13 OR L14 OR L15 OR L16))  
AND (SURFACE? OR LAYER#### OR MULTILAYER#### OR TOPLAYER####  
OR INTERLAYER#### OR FILM OR COAT#### OR INTERFAC### OR  
SUBLAYER### OR BOTTOMLAYER? OR OVERLAY? OR OVERLAID OR  
MONOLAYER? OR SHEET?)

L18 30 SEA ABB=ON PLU=ON (L7 OR L8 OR L9) AND ((UNEVEN## OR  
EVEN##) (2A) (DISPERS?))

L19 362 SEA ABB=ON PLU=ON ((L7 OR L8 OR L9)) AND ((DEFECT OR PARTIC?  
 OR GRANUL? OR MICROGRAN? OR GRAIN OR MICROPARTIC? OR NANOPARTIC  
 ) (2A) (DENSIT### OR VOLUME))  
 L20 1080 SEA ABB=ON PLU=ON ((L7 OR L8 OR L9)) AND (TEXTURE# OR  
 ENGINEERED OR CONTROLLED OR PREDETERMINED) (2A) (SURFACE? OR  
 LAYER#### OR MULTILAYER#### OR TOPLAYER#### OR INTERLAYER####  
 OR FILM OR COAT#### OR INTERFAC### OR SUBLAYER### OR BOTTOMLAYE  
 R? OR OVERLAY? OR OVERLAID)  
 L21 25 SEA ABB=ON PLU=ON ((L7 OR L8 OR L9)) AND (INFILM OR IN  
 FILM) (2A) (DENSIT### OR VOLUME OR PARTIC? OR MICROPARTIC? OR  
 NANOPARTIC? OR FEATURE OR ?ROUGH? OR SMOOTH? OR UNIFORM?)  
 L22 71596 SEA ABB=ON PLU=ON ((L7 OR L8 OR L9)) AND (SURFACE? OR LAYER?  
 OR MULTILAYER? OR TOPLAYER? OR INTERLAYER? OR FILM OR COAT####  
 OR INTERFAC### (3A) ARCHITECTUR? OR FEATURE OR STRUCTURE OR  
 MORPHOL? OR TEXTURE# OR MICROTEXTURE# OR TOPOG# OR CHARACTERIST  
 IC OR SHAPE# OR DEVIATION)  
 L23 2647 SEA ABB=ON PLU=ON ((L7 OR L8 OR L9)) AND (SURFACE? OR  
 LAYER#### OR MULTILAYER#### OR TOPLAYER#### OR INTERLAYER####  
 OR FILM OR COAT#### OR INTERFAC### OR BOTTOMLAYER? OR OVERLAY?  
 OR OVERLAID) (3A) (ROUGH? OR SMOOTH? OR METROLOG? OR GEOMETR? OR  
 WAVINESS OR DIMENSION?)  
 L24 27 SEA ABB=ON PLU=ON ((L7 OR L8 OR L9)) AND (MICROROUGH? OR  
 MICROSMOOTH? OR GRAINY OR ASPERIT? OR MICROTOPOG?)  
 L25 15 SEA ABB=ON PLU=ON ((L7 OR L8 OR L9)) AND (VALLEY(1A) PEAK)  
 L26 1 SEA ABB=ON PLU=ON ((L7 OR L8 OR L9)) AND ((PARTIC? OR  
 MICROPARTIC? OR NANOPARTIC?) (2A) (STICK OR STICKING)) (3A) ((SURFA  
 CE? OR LAYER#### OR MULTILAYER#### OR TOPLAYER#### OR INTERLAYE  
 R#### OR FILM OR COAT#### OR INTERFAC###))  
 L27 258 SEA ABB=ON PLU=ON ((L7 OR L8 OR L9)) AND (MICROPARTIC? OR  
 NANOPARTIC? OR PARTIC?) (2A) (ARRAY OR MATRIX OR MATRIC### OR  
 PATTERN? OR MICROPATTERN? OR NANOPATTERN?)  
 L28 42093 SEA ABB=ON PLU=ON (L1 OR L2 OR L3)  
 L29 5205 SEA ABB=ON PLU=ON L28 AND (ABRASIV? OR RUGOSIT### OR  
 DISTORT? OR ROUGH##### OR INFILM OR IN FILM OR SMOOTH##### OR  
 UNSMOOTH? OR UNIFORM##### OR NONUNIFORM##### OR IMPERFECT#####  
 OR DEFECT OR DEFORM#####)  
 L30 10310 SEA ABB=ON PLU=ON L28 AND (ANOMAL### OR NOTCH### OR CRACK###  
 OR HOLE OR VOID OR RECESS## MICROVOID OR NANOVOID OR DISLOCAT##  
 ## OR IMPURIT### OR CONTAMINAN### OR CONTAMINAT##### OR  
 IRREGULAR#####)  
 L31 5494 SEA ABB=ON PLU=ON L28 AND (BUMP# OR LEVEL OR FLAT OR  
 EVEN#### OR UNEVEN#### OR JAGGED OR TOPOG? OR PIT OR PITTING  
 OR SCUFF? OR PEAK OR VALLEY OR GRIT### OR COARSE#### OR  
 SCRATCH#### OR REGULAR#####)  
 L32 97 SEA ABB=ON PLU=ON L28 AND ((DEFECT OR PARTIC? OR GRANUL? OR  
 MICROGRAN? OR GRAIN OR MICROPARTIC? OR NANOPARTIC) (2A) (DENSIT##  
 # OR VOLUME))  
 L33 5 SEA ABB=ON PLU=ON L28 AND ((UNEVEN## OR EVEN##) (2A) (DISPERS?))  
 L34 738 SEA ABB=ON PLU=ON L28 AND (TEXTURE# OR ENGINEERED OR  
 CONTROLLED OR PREDETERMINED) (2A) (SURFACE? OR LAYER#### OR  
 MULTILAYER#### OR TOPLAYER#### OR INTERLAYER#### OR FILM OR  
 COAT#### OR INTERFAC### OR SUBLAYER### OR BOTTOMLAYER? OR  
 OVERLAY? OR OVERLAID)  
 L35 19 SEA ABB=ON PLU=ON L28 AND (INFILM OR IN FILM) (2A) (DENSIT###  
 OR VOLUME OR PARTIC? OR MICROPARTIC? OR NANOPARTIC? OR FEATURE  
 OR ?ROUGH? OR SMOOTH? OR UNIFORM?)  
 L36 42021 SEA ABB=ON PLU=ON L28 AND (SURFACE OR LAYER? OR MULTILAYER?  
 OR TOPLAYER? OR INTERLAYER? OR FILM OR COAT#### OR INTERFAC### (3A)  
 ARCHITECTUR? OR FEATURE OR STRUCTURE OR MORPHOL? OR  
 TEXTURE# OR MICROTEXTURE# OR TOPOG# OR CHARACTERISTIC OR  
 SHAPE# OR DEVIATION)  
 L37 1337 SEA ABB=ON PLU=ON L28 AND (SURFACE OR LAYER#### OR MULTILAYER  
 #### OR TOPLAYER#### OR INTERLAYER#### OR FILM OR COAT#### OR  
 INTERFAC### OR BOTTOMLAYER? OR OVERLAY? OR OVERLAID) (3A) (ROUGH?  
 OR SMOOTH? OR METROLOG? OR GEOMETR? OR WAVINESS OR DIMENSION?)  
 L38 10 SEA ABB=ON PLU=ON L28 AND (MICROROUGH? OR MICROSMOOTH? OR  
 GRAINY OR ASPERIT? OR MICROTOPOG?)  
 L39 5 SEA ABB=ON PLU=ON L28 AND (VALLEY(1A) PEAK)  
 L40 0 SEA ABB=ON PLU=ON L28 AND ((PARTIC? OR MICROPARTIC? OR  
 NANOPARTIC?) (2A) (STICK OR STICKING)) (3A) ((SURFACE? OR LAYER####  
 OR MULTILAYER#### OR TOPLAYER#### OR INTERLAYER#### OR FILM  
 OR COAT#### OR INTERFAC###))

L41 35 SEA ABB=ON PLU=ON L28 AND (MICROPARTIC? OR NANOPARTIC? OR  
 PARTIC?) (2A) (ARRAY OR MATRIX OR MATRIC### OR PATTERN? OR  
 MICROPATTERN? OR NANOPATTERN?)  
 L42 76024 SEA ABB=ON PLU=ON ((L11 OR L12 OR L13 OR L14 OR L15 OR L16))  
 OR ((L18 OR L19 OR L20 OR L21 OR L22 OR L23 OR L24 OR L25 OR  
 L26 OR L27)) OR ((L29 OR L30 OR L31 OR L32 OR L33 OR L34 OR  
 L35 OR L36 OR L37 OR L38 OR L39 OR L40 OR L41))  
 L43 42046 SEA ABB=ON PLU=ON L42 AND ((L1 OR L2 OR L3))  
 L44 42032 SEA ABB=ON PLU=ON L43 AND (SURFACE? OR LAYER#### OR MULTILAYE  
 R#### OR TOPLAYER#### OR INTERLAYER#### OR FILM OR COAT#### OR  
 INTERFAC### OR SUBLAYER### OR BOTTOMLAYER? OR OVERLAY? OR  
 OVERLAID OR MONOLAYER? OR SHEET?)  
 L45 1175 SEA ABB=ON PLU=ON L43 AND (ANTIREFLECT##### OR ANTI REFLEC###  
 ### OR ANTIGLAR### OR ANTI GLAR#####)  
 L46 38 SEA ABB=ON PLU=ON L43 AND (NONGLAR#### OR NON GLAR##### OR  
 NONREFLECT##### OR NON REFLECT#####)  
 L47 184 SEA ABB=ON PLU=ON L43 AND (REDUC#### OR DECREAS#### OR  
 LOWER####) (3A) (REFLECT#### OR GLAR##)  
 L48 1325 SEA ABB=ON PLU=ON (L45 OR L46 OR L47)  
 L49 164 SEA ABB=ON PLU=ON L44 AND (INFILM OR IN FILM)  
 L50 6 SEA ABB=ON PLU=ON L48 AND (INFILM OR IN FILM)  
 L51 738 SEA ABB=ON PLU=ON L44 AND (TEXTURE# OR ENGINEERED OR  
 CONTROLLED OR PREDETERMINED) (2A) (SURFACE? OR LAYER#### OR  
 MULTILAYER#### OR TOPLAYER#### OR INTERLAYER#### OR FILM OR  
 COAT#### OR INTERFAC### OR SUBLAYER### OR BOTTOMLAYER? OR  
 OVERLAY? OR OVERLAID)  
 L52 42015 SEA ABB=ON PLU=ON L44 AND (SURFACE OR LAYER? OR MULTILAYER?  
 OR TOPLAYER? OR INTERLAYER? OR FILM OR COAT#### OR INTERFAC### (3A)  
 ARCHITECTUR? OR FEATURE OR STRUCTURE OR MORPHOL? OR  
 TEXTURE# OR MICROTEXTURE# OR TOPOG# OR CHARACTERISTIC OR  
 SHAPE# OR DEVIATION)  
 L53 2777 SEA ABB=ON PLU=ON L44 AND (SURFACE(3A) ROUGH? OR SMOOTH? OR  
 METROLOG? OR GEOMETR? OR WAVINESS OR DIMENSION?)  
 L54 182 SEA ABB=ON PLU=ON L48 AND (SURFACE(3A) ROUGH? OR SMOOTH? OR  
 METROLOG? OR GEOMETR? OR WAVINESS OR DIMENSION?)  
 L55 5 SEA ABB=ON PLU=ON L44 AND (VALLEY(1A) PEAK)  
 L56 77 SEA ABB=ON PLU=ON L44 AND (BARC OR DARC)  
 L57 196 SEA ABB=ON PLU=ON L44 AND (AC OR ARC) (3A) (SURFACE OR ?COAT?  
 OR FILM? OR GLASS## OR LENS OR LAYER? OR INTERFAC###)  
 L58 20440 SEA ABB=ON PLU=ON L44 AND SURFACE  
 L59 2690 SEA ABB=ON PLU=ON ((L45 OR L46 OR L47 OR L48 OR L49 OR L50  
 OR L51)) OR ((L53 OR L54 OR L55)) AND SURFACE  
 L60 42032 SEA ABB=ON PLU=ON ((L11 OR L12 OR L13 OR L14 OR L15 OR L16  
 OR L17 OR L18 OR L19 OR L20 OR L21 OR L22 OR L23 OR L24 OR L25  
 OR L26 OR L27)) AND L44  
 L61 164 SEA ABB=ON PLU=ON L60 AND (INFILM OR IN FILM)  
 L62 4 SEA ABB=ON PLU=ON L43 AND (INFILM OR IN FILM) (2A) (PARTIC? OR  
 MICROPARTIC? OR NANOPARTIC? OR DENSIT### OR VOLUME)  
 L63 18 SEA ABB=ON PLU=ON L43 AND (TEXTURE#) (1A) (SURFACE)  
 L64 1 SEA ABB=ON PLU=ON L43 AND (ENGINEERED) (1A) (SURFACE)  
 L65 237 SEA ABB=ON PLU=ON L43 AND (SURFACE) (1A) (ROUGHNESS)  
 L66 358 SEA ABB=ON PLU=ON L43 AND (SURFACE) (1A) (ROUGH?)  
 L67 221 SEA ABB=ON PLU=ON L43 AND (SURFACE) (1A) (SMOOTH?)  
 L68 154 SEA ABB=ON PLU=ON L43 AND (METROLOG? OR GEOMETR? OR WAVINESS)  
 L69 2 SEA ABB=ON PLU=ON L43 AND (SURFACE) (1A) (METROLOG? OR  
 GEOMETR? OR WAVINESS)  
 L70 5 SEA ABB=ON PLU=ON L43 AND (SURFACE) (3A) (METROLOG? OR  
 GEOMETR? OR WAVINESS)  
 L71 5 SEA ABB=ON PLU=ON L43 AND ((SURFACE) (3A) (MICROROUGH? OR  
 MICROSMOOTH? OR GRAINY OR ASPERIT? OR MICROTOPOG?))  
 L72 97 SEA ABB=ON PLU=ON L43 AND ((DEFECT OR PARTIC? OR GRANUL? OR  
 MICROGRAN? OR GRAIN OR MICROPARTIC? OR NANOPARTIC) (2A) (DENSIT##  
 # OR VOLUME))  
 L73 30 SEA ABB=ON PLU=ON L43 AND (SURFACE) (1A) (IRREGULAR? OR  
 REGULAR?)  
 L74 547 SEA ABB=ON PLU=ON L43 AND (SURFACE) (2A) (FLAT##### OR JAGGED  
 OR TOPOGR?)  
 L75 114 SEA ABB=ON PLU=ON L43 AND (SURFACE) (2A) (EVENNESS OR LEVEL)  
 L76 60 SEA ABB=ON PLU=ON L43 AND (SURFACE) (2A) (DEFECT OR DEFORM?)  
 L77 22 SEA ABB=ON PLU=ON L43 AND (SURFACE) (2A) (ABRASIV? OR RUGOSIT##  
 # OR DISTORT?)  
 L78 25 SEA ABB=ON PLU=ON L43 AND (SURFACE) (2A) (GRIT### OR COARSE####  
 OR SCRATCH####)



L79 56 SEA ABB=ON PLU=ON L43 AND ((DEFECT OR PARTIC? OR GRANUL? OR MICROGRAN? OR GRAIN OR MICROPARTIC? OR NANOPARTIC) (2A) (DENSIT## # OR VOLUME)) AND SURFACE  
 L80 2 SEA ABB=ON PLU=ON L43 AND ((UNEVEN## OR EVEN##) (2A) (DISPERS?) ) AND SURFACE  
 L81 2 SEA ABB=ON PLU=ON L43 AND (SURFACE) (1A) (INFILM OR IN FILM)  
 L82 344 SEA ABB=ON PLU=ON L18 OR L21 OR L24 OR L25 OR L26 OR L33 OR L39 OR L41 OR L55 OR ((L62 OR L63 OR L64)) OR ((L69 OR L70 OR L71)) OR L73 OR ((L76 OR L77 OR L78 OR L79 OR L80 OR L81))  
 L83 1372 SEA ABB=ON PLU=ON ((L56 OR L57)) OR (L45 OR L46 OR L47)  
 L84 641 SEA ABB=ON PLU=ON L83 AND SURFACE  
 L85 14 SEA ABB=ON PLU=ON L83 AND L82  
 L86 701 SEA ABB=ON PLU=ON (L65 OR L66 OR L67 OR L68)  
 L87 912 SEA ABB=ON PLU=ON L51 OR L54  
 L88 2992 SEA ABB=ON PLU=ON (L82 OR L83 OR L84 OR L85 OR L86 OR L87)  
 L89 1406 SEA ABB=ON PLU=ON L88 AND 1980-1998/PRY,PY  
 L90 2018 SEA ABB=ON PLU=ON L88 AND 1999-2007/PRY,PY  
 L91 974 SEA ABB=ON PLU=ON L88 NOT L90  
 L92 1426 SEA ABB=ON PLU=ON L91 OR L89  
 L93 10 SEA ABB=ON PLU=ON L92 AND (BARC OR DARC)  
 L94 410 SEA ABB=ON PLU=ON L92 AND (ANTIREFLECT##### OR ANTI REFLEC###  
 ### OR ANTIGLAR### OR ANTI GLAR#####)  
 L95 33 SEA ABB=ON PLU=ON L92 AND (NONGLAR##### OR NON GLAR##### OR  
 NONREFLECT##### OR NON REFLECT#####)  
 L96 6 SEA ABB=ON PLU=ON L92 AND (EMBEDDED) (2A) (SURFACE OR FILM OR  
 LAYER)  
 L97 357 SEA ABB=ON PLU=ON L92 AND (SURFACE OR FILM OR LAYER#### OR  
 MULTILAYER#### OR INTERFAC###) (3A) (ROUGH? OR SMOOTH? OR INFILM  
 OR IN FILM OR TEXTURE#)  
 L98 29 SEA ABB=ON PLU=ON L92 AND (SURFACE OR FILM OR LAYER#### OR  
 MULTILAYER#### OR INTERFAC###) (3A) (PARTIC? OR MICROPARTIC? OR  
 NANOPARTIC? OR GRANUL? OR MICROGRANUL?)  
 L99 9 SEA ABB=ON PLU=ON L94 AND (SURFACE OR FILM OR LAYER#### OR  
 MULTILAYER#### OR INTERFAC###) (3A) (PARTIC? OR MICROPARTIC? OR  
 NANOPARTIC? OR GRANUL? OR MICROGRANUL?)  
 L100 1284 SEA ABB=ON PLU=ON L21 OR L24 OR L25 OR L26 OR L35 OR L38 OR  
 L39 OR L56 OR L61 OR L62 OR (L69 OR L70 OR L71 OR L72 OR L73)  
 OR (L76 OR L77 OR L78 OR L79 OR L80 OR L81) OR L85 OR L93 OR  
 (L94 OR L95 OR L96 OR L97 OR L98 OR L99)  
 L101 1020 SEA ABB=ON PLU=ON L100 AND 1980-1998/PRY,PY  
 L102 592 SEA ABB=ON PLU=ON L100 AND 1999-2007/PRY,PY  
 L103 692 SEA ABB=ON PLU=ON L100 NOT L102  
 L104 1036 SEA ABB=ON PLU=ON L101 OR L103  
 L105 1535 SEA ABB=ON PLU=ON L92 OR L104  
 L106 410 SEA ABB=ON PLU=ON L105 AND (ANTIREFLECT##### OR ANTI  
 REFLEC##### OR ANTIGLAR### OR ANTI GLAR#####)  
 L107 33 SEA ABB=ON PLU=ON L105 AND (NONGLAR##### OR NON GLAR##### OR  
 NONREFLECT##### OR NON REFLECT#####)  
 L108 79 SEA ABB=ON PLU=ON L105 AND (REDUC#### OR DECREAS#### OR  
 LOWER####) (3A) (REFLECT#### OR GLAR##)  
 L109 324 SEA ABB=ON PLU=ON L105 AND (SURFACE OR FILM) (2A) (ROUGH? OR  
 SMOOTH?)  
 L110 25 SEA ABB=ON PLU=ON L105 AND (SURFACE OR FILM) (2A) (TEXTURE# OR  
 ENGINEERED OR TOPOG?)  
 L111 7 SEA ABB=ON PLU=ON L105 AND (SURFACE OR FILM) (2A) (MICROROUGH?  
 OR MICROSMOOTH? OR GRAINY OR ASPERIT? OR MICROTOPOG?)  
 L112 3 SEA ABB=ON PLU=ON L105 AND (SURFACE OR FILM) (2A) (METROLOG?  
 OR GEOMETR? OR WAVINESS)  
 L113 93 SEA ABB=ON PLU=ON L105 AND (SURFACE OR FILM) (2A) (ARRAY OR  
 MATRIX OR MATRIC### OR PATTERN? OR MICROPATTERN? OR NANOPATTERN  
 ?)  
 L114 38 SEA ABB=ON PLU=ON L105 AND (SURFACE OR FILM) (2A) (UNIFORM? OR  
 NONUNIFORM?)  
 L115 7 SEA ABB=ON PLU=ON L105 AND (SURFACE) AND (PARTICLE OR  
 NANOPARTIC? OR MICROPARTIC?) (2A) (DENSIT### OR VOLUME OR  
 DIMENSION?)  
 L116 29 SEA ABB=ON PLU=ON L105 AND (SURFACE OR FILM) (2A) (PITTING OR  
 PIT OR IRREGULAR?)  
 L117 4 SEA ABB=ON PLU=ON L105 AND (SURFACE OR FILM) (2A) (RUGOSIT? OR  
 ANOMAL### OR UNSMOOTH? OR DISTORT?)  
 L118 12 SEA ABB=ON PLU=ON L105 AND (INFILM OR IN FILM) (2A) (DENSIT###  
 OR VOLUME OR PARTIC? OR MICROPARTIC? OR NANOPARTIC? OR FEATURE  
 OR ROUGH? OR SMOOTH? OR UNIFORM?)

L119 201 SEA ABB=ON PLU=ON (L110 OR L111 OR L112 OR L113 OR L114 OR  
 L115 OR L116 OR L117 OR L118)  
 L120 704 SEA ABB=ON PLU=ON ((L106 OR L107 OR L108 OR L109 OR L110 OR  
 L111 OR L112 OR L113 OR L114 OR L115 OR L116 OR L117 OR L118))  
 AND (SILICON NITRIDE OR SI3N4 OR TRISILICON TETRANITRIDE OR  
 SIN)  
 L121 167 SEA ABB=ON PLU=ON L119 AND (SILICON NITRIDE OR SI3N4 OR  
 TRISILICON TETRANITRIDE OR SIN)  
 L122 59 SEA ABB=ON PLU=ON L119 AND (SION OR SINO OR OXYNITRIDE OR  
 OXIDE(A) NITRIDE OR SILICON(1A) OXIME OR SI OXIME OR SI  
 NITRIDE)  
 L123 2 SEA ABB=ON PLU=ON L119 AND ((SI(1W) O(1W) N) OR (SI(2W)  
 O(2W) N) OR (SI(1W) N(1W) O))  
 L124 26 SEA ABB=ON PLU=ON (L121) AND ((L122 OR L123))  
 L125 201 SEA ABB=ON PLU=ON (L121 OR L122 OR L123 OR L124)  
 L126 120 SEA ABB=ON PLU=ON L125 AND (SILICON NITRIDE OR SI3N4 OR  
 TRISILICON TETRANITRIDE OR SIN) (3A) (FILM OR SURFACE OR  
 INTERFAC?)  
 L127 38 SEA ABB=ON PLU=ON L125 AND (SION OR SINO OR OXYNITRIDE OR  
 OXIDE(A) NITRIDE OR SILICON(1A) OXIME OR SI OXIME OR SI  
 NITRIDE) (3A) (FILM OR SURFACE OR INTERFAC?)  
 L128 1 SEA ABB=ON PLU=ON L125 AND ((SI(1W) O(1W) N) OR (SI(2W)  
 O(2W) N) OR (SI(1W) N(1W) O)) (3A) (SURFACE OR FILM OR INTERFAC?)  
 L129 22 SEA ABB=ON PLU=ON L125 AND (INFILM OR IN FILM)  
 L130 281 SEA ABB=ON PLU=ON L21 OR L25 OR L26 OR L35 OR L50 OR L55 OR  
 L62 OR L63 OR L69 OR L70 OR L71 OR L73 OR L76 OR L80 OR L81 OR  
 L85 OR L93 OR L96 OR L99 OR (L110 OR L111 OR L112) OR (L114 OR  
 L115 OR L116 OR L117 OR L118) OR (L122 OR L123 OR L124) OR  
 L127 OR L129  
 L131 215 SEA ABB=ON PLU=ON L130 AND 1980-1998/PRY,PY  
 L132 137 SEA ABB=ON PLU=ON L130 AND 1999-2007/PRY,PY  
 L133 144 SEA ABB=ON PLU=ON L130 NOT L132  
 L134 218 SEA ABB=ON PLU=ON L131 OR L133  
 L135 166 SEA ABB=ON PLU=ON L134 AND (SILICON NITRIDE OR SI3N4 OR  
 TRISILICON TETRANITRIDE OR SIN)  
 L136 83 SEA ABB=ON PLU=ON L134 AND (SION OR SINO OR OXYNITRIDE OR  
 OXIDE(A) NITRIDE OR SILICON(1A) OXIME OR SI OXIME OR SI  
 NITRIDE)  
 L137 215 SEA ABB=ON PLU=ON L135 OR L136  
 L138 14 SEA ABB=ON PLU=ON L137 AND (BARC OR DARC OR ARC OR AC)  
 L139 43 SEA ABB=ON PLU=ON L137 AND (ANTIREFLECT##### OR ANTI  
 REFLEC##### OR ANTIGLAR### OR ANTI GLAR#####)  
 L140 0 SEA ABB=ON PLU=ON L137 AND (NONGLAR#### OR NON GLAR##### OR  
 NONREFLECT##### OR NON REFLECT#####)  
 L141 4 SEA ABB=ON PLU=ON L137 AND (REDUC#### OR DECREAS#### OR  
 LOWER####) (3A) (REFLECT#### OR GLAR##)  
 L142 53 SEA ABB=ON PLU=ON L137 AND (SURFACE) (1A) (TEXTURE# OR ROUGH?  
 OR SMOOTH? OR INFILM OR IN FILM)  
 L143 7 SEA ABB=ON PLU=ON L137 AND (SURFACE) (1A) (ARCHITECTUR? OR  
 FEATURE OR MICROTTEXTURE# OR TOPOG# OR CHARACTERISTIC OR SHAPE#  
 OR DEVIATION)  
 L144 6 SEA ABB=ON PLU=ON L137 AND (SURFACE) AND (PARTIC? OR  
 NANOPARTIC? OR MICROPARTIC?) (2A) (DENSIT### OR VOLUME)  
 L145 3 SEA ABB=ON PLU=ON L137 AND (SURFACE) (1A) (UNIFORM? OR  
 NONUNIFORM? OR GRAINY)  
 L146 1 SEA ABB=ON PLU=ON L137 AND (SURFACE) (1A) (ENGINEERED OR  
 PREDETERMINED)  
 L147 38 SEA ABB=ON PLU=ON L137 AND (SURFACE) (2A) (DEFECT OR DEFORM?)  
 L148 28 SEA ABB=ON PLU=ON L137 AND (SURFACE) (2A) (IMPERFECT? OR  
 IRREGULAR? OR ANOMAL###)  
 L149 160 SEA ABB=ON PLU=ON (L138 OR L139 OR L140 OR L141 OR L142 OR  
 L143 OR L144 OR L145 OR L146 OR L147 OR L148)  
 D L149 5 ALL  
 L150 96 SEA ABB=ON PLU=ON L149 AND SEMICONDUCT?  
 D L149 ALL 1-160

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	79416	(surface or film) near2 (uniform\$4 or nonuniform\$4 or irregular\$5 or topogr\$5)	EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/17 16:25
L2	45669	(surface or film) near2 (texture\$2 or engineered or controlled or predetermined)	EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/17 16:25
L3	2062	(film adj smooth\$4)	EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/17 16:25
L4	986	(film adj rough\$5)	EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/17 16:25
L5	19752	(surface adj smooth\$4)	EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/17 16:25
L6	46513	(surface adj rough\$5)	EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/17 16:25
L7	187426	(L6 or L5 or L4 or L3 or L1 or L2)	EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/17 16:25
L8	1558	L7 and ((silicon adj nitride) or (silicon adj oxynitride) or (silicon adj oxime) or SiN or Si3N4)	EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/17 16:36
L9	48	L8 and (AR or AC or ARC or DARC or BARC)	EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/17 16:25
L10	27	L8 and (antireflect\$5 or (anti adj reflect\$5) or (non adj reflect\$5) or nonreflect\$4 or antiglar\$3 or (anti adj glar\$3) or anti-reflect\$5 or anti-glar\$3)	EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/17 16:25
L11	67911	L6 or L5 or L4 or L3	EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/17 16:25
L12	8304	L11 and (particle or microparticle or nanoparticle)	EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/17 16:25
L13	80	L12 and (SiN or (silicon adj nitride) or oxynitride or oxime or Si3N4)	EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/17 16:25
L14	10	L8 and (reduc\$4 or decreas\$3 or lower\$3) near2 (defect or deform\$5 or imperfect\$5)	EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/17 16:25

## EAST Search History

L15	82	L9 or L10 or L14	EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/17 16:25
L16	82	L15 not L17	EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/17 16:25
L17	17772	(particle or nanoparticle or microparticle or defect) near2 (rough\$4 or smooth\$4 or uniform\$4 or nonuniform\$4 or non-uniform\$4)	EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/17 16:25
L18	12784	(particle) near2 (density\$3 or volume)	EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/17 16:25
L19	2015	L7 and (L17 or L18)	EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/17 16:25
L20	16	L19 and (SiN or (silicon adj nitride) or oxynitride or Si3N4 or SixOyNz)	EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/17 16:28
L21	78	L15 not L20	EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/17 16:25
L22	43	L12 and (antireflect\$4 or (anti adj reflect\$4) or anti-reflect\$4 or antiglar\$4 or anti-glar\$4 or (anti adj glar\$3))	EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/17 16:25
L23	176	(surface or film) near2 (peak adj1 valley)	EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/17 16:25
L24	77	L13 not L22	EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/17 16:27
L25	163	I7 and ((surface adj area) near3 (particle))	EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/17 16:27
L26	247	I7 and ((surface adj area) near5 (particle))	EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/17 16:28
L27	1	I26 and (SiN or (silicon adj nitride) or oxynitride or Si3N4 or SixOyNz)	EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/17 16:29
L28	625	I7 and (surface adj area) near3 (surface or film)	EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/17 16:29
L29	8	I28 and (SiN or (silicon adj nitride) or oxynitride or Si3N4 or SixOyNz)	EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/17 16:29

## EAST Search History

L30	15	I8 and (reduc\$3 or decreas\$3 or lower\$3) near2 (defect or irregular\$5)	EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/17 16:37
L31	0	I8 and ((In adj film) near2 (particle))	EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/17 16:38
L32	1	I8 and (particle near2 square)	EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/17 16:38
L33	0	I8 and (distortion adj free)	EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/17 16:38
L34	8	I8 and (distortion)	EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/17 16:39
L35	77	I8 and (surface or film) near2 (densit\$3 or volume or area)	EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/17 16:40
L36	98	I27 or I29 or I30 or I32 or I34 or I35	EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/17 16:41
L37	87	I36 not I21	EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/17 16:48
L38	34	I8 and (particle adj size)	EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/17 16:48
L39	31	I38 not I37	EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/17 16:50
L40	1	I8 and (particle) near3 dimension	EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/17 16:52
L41	665	I8 and ((non-uniform\$5 or non uniform\$5))	EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/17 16:53
L42	373	I8 and (surface adj roughness)	EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/17 16:53
L43	95	I8 and (surface adj smooth\$4)	EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/17 16:54
L44	7	(I42 or I43) and (BARC or DARC or antireflect\$5 or (anti adj reflect\$5) or anti-reflect\$5 or antiglar\$3 or (anti adj glar\$3) or nonreflect\$4 or (non adj reflect\$4))	EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/17 16:58

## EAST Search History

L45	7	I40 or I44	EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/17 16:58
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2 14875  
**SEARCH REQUEST FORM** Scientific and Technical Information Center - EIC2800  
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Date 2/6/07 Serial # 10/715,229 Priority Application Date 6/10/98  
Your Name M. Lewis Examiner # 73172  
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In what format would you like your results? Paper is the default. PAPER DISK EMAIL  
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Where have you searched so far on this case?

Circle: USPT DWPI EPO Abs JPO Abs IBM TDB  
Other: need before 2/9

What relevant art have you found so far? Please attach citations or Information Disclosure Statements.

What types of references would you like? Please checkmark:

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Is this a "Fast & Focused Search" request? (Circle One) YES **NO**

A "Fast & Focused Search" is completed in 2-3 hours (maximum). The search must be on a very specific topic and meet certain criteria. The criteria are posted in EIC2800 and on the STIC NPL Web Page at <http://uspto-a-pattr-2/siraapps/stic/npl/nplsearch.htm>

What is the topic, such as the novelty, motivation, utility, or other specific facets defining the desired focus of this search? Please include the concepts, synonyms, keywords, acronyms, registry numbers, definitions, structures, strategies, and anything else that helps to describe the topic. Please attach a copy of the abstract and pertinent claims.

Claims 1-12 & 14  
Antireflective Material

Problem: See pages 2-6  
Solution: " " 6-8

Smooth antireflective coating  
which is distortion-free

Please look for materials and

pages that  
are disclosed

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